The Alberta Journal of Educational Research *Vol. 52, No. 4, Winter 2006, 265-276*

Ronald G. Fischer
Minot State University, North Dakota

Jerome M. Fischer
University of Idaho, Moscow

The Development of an Emotional Response to Literature Measure: The Affective Response to Literature Survey

Based on theories of emotional intelligence, adult education, psychology of reading, and emotions and literature, this study was designed to develop and validate the Affective Response to Literature Survey (ARLS), a psychological instrument used to measure an emotional response to literature. Initially, 27 items were generated by a review of research relevant to emotional intelligence and emotional effects of literature. A panel of 10 experts rated 27 proposed items. After applying the content validity ratio to the expert's ratings, 18 items were retained. The instrument was then administered to 165 individuals to assess psychometric properties. The ARLS demonstrated high internal consistency (Cronbach's alpha=.90) and test-retest reliability (r=.90, p<.001). Factor analysis extracted four factors: (a) Reflective Synthesis, (b) Acting with Volition, (c) Processing, and (d) Empathetic Responding. The four factors have important implications for conducting research sensitive to literature, emotional intelligence, and transformational learning.

Cette étude puise dans les théories portant sur le quotient émotionnel, l'éducation aux adultes, la psychologie de la lecture et les émotions et la littérature. Elle a été conçue pour le développement et la validation d'un instrument psychologique servant à mesurer la réaction affective à la littérature (Affective Response to Literature Survey, ARLS).Une analyse de la recherche relative au quotient émotionnel et à la réaction affective à la littérature a produit 27 items qu'un groupe de spécialistes a évalués. Après avoir appliqué le rapport de validité de contenu aux évaluations par les spécialistes, l'on a retenu 18 items. Par la suite, le sondage a été distribué à 165 personnes pour l'évaluation de propriétés psychométriques. Le sondage ARLS a fait preuve d'un niveau de cohérence interne (alpha de Cronbach = 0,90) et d'une fiabilité test-retest (r=0,90, p<0,001) élevé. Quatre facteurs découlent de l'analyse: (a) synthèse réfléchie, (b) agir avec volonté, (c) traitement et (d) réaction empathique. Ces quatre facteurs jouent un rôle important dans la recherche portant sur la littérature, le quotient émotionnel et l'apprentissage transformationnel.

Historically, intelligence has been measured by verbal, abstract, visual, and quantitative reasoning along with memory (Thorndike, Hagen, & Sattler, 1986). Wechsler (1997) constructed his intelligence test to measure verbal and performance constructs. Subsequent factor analysis of the Wechsler IQ test identified verbal comprehension, perceptual organization, freedom from distraction, and processing speed as underlying constructs (Kamphaus, Benson,

Ronald Fischer is an assistant professor of English and has been working for three years with curriculum designed to enhance emotional intelligence.
Jerome Fischer is a professor of rehabilitation counseling in Counseling and School Psychology.

Hutchinson, & Platt, 1994). However, it has been recognized by the test developer that non-intellective factors need to be taken into account when assessing intelligence. These factors included inclination, affect, personality, drive, persistence, and goal awareness.

Gardner (1983) conceived of intelligence as consisting of multiple abilities not typically measured by the various well-known intelligence tests. He posited that seven constructs existed: visual/spatial, musical, verbal, logical/mathematical, interpersonal, intrapersonal, and bodily/kinesthetic. Interpersonal intelligence was defined as communication and understanding others' feelings and motives. Accordingly, intrapersonal intelligence was defined as awareness of one's own feelings and self-motivation.

Since the 1990s, emotional intelligence has become an emerging focal point for research (Davies, Stankov, & Roberts, 1998; Elias et al., 1997; Goleman, 1995; Mayer, Caruso, & Salovey, 1999; Mayer & Cobb, 2000; Mayer & Salovey, 1993, 1997). Emotional intelligence is made up of several factors. Salient among these is the ability to recognize the meaning of emotions. An individual who possesses a high Emotional Quotient (EQ) readily perceives emotions, assimilates emotion-related feelings, understands the information of those emotions, and manages them. Rather than suppressing emotional conflicts, a person with a high EQ can solve emotional problems. Doty (2001) expanded these attributes to include handling stress; becoming less socially anxious and dealing with feelings of loneliness; gaining an ability to see and appreciate another's emotional state and becoming empathetic; analyzing and understanding relationships; solving problems in relationships; understanding the emotional dynamics of groups; employing group interaction skills; and managing the emotions of the group.

Emotional intelligence is also an emerging field in adult education as it has evolved over the years. At first it differentiated itself from pedagogy recognizing that adults incorporate learning into their past experiences, they are self directed in nature, their learning is closely related to their social roles, and adults are more problem-centered than subject-centered learners (Knowles, 1984). Cross (1981) developed a theory of adult learning based on situational and personal characteristics of the learner. Situational characteristics included part-time learning versus full-time learning and voluntary learning versus compulsory learning. Personal characteristics posited were physiology, age, sociocultural variables, life phases, and psychological/developmental stages. Knox (1980) took a different approach and based his central premise on adults engaging in learning because of a discrepancy between current and a desired level of proficiency.

Mezirow (1991) established the theory of transformational learning, which incorporates the concept that the adults learn by interpreting their life experiences. They learn by making meaning of these experiences. Accordingly, adults have meaning schemes (specific beliefs, feelings, attitudes, and value judgments) and meaning perspectives (broad, generalized, orienting predispositions). Perspective transformations is a process whereby the individual becomes reflective of the world view he or she holds, understand the constraints of the perspective, integrate other perspectives, and reformulate how he or she makes meaning of experiences. Developmentally, adults first go

through the stage of exercising critical reflection; second, they build a capacity of dialectical or systemic thinking; and third, they assert themselves as a conscious creative force in the world. Freire's (1970) concepts are related to Mezirow's transformational learning except that his theories of learning are much more imbued with the purposes of social change. He believed that men and women were not mere receptors of knowledge, but knowing subjects who seek to achieve a deepening awareness both of the sociocultural reality that shapes their lives and of their capacity to transform that reality. Taylor (2001), on the other hand, reconfigured the theory of transformational learning by elevating the variable of emotion. Emerging from neurobiological research involving cognition and emotion, he uncovered the necessity of emotion to filter out relevant from irrelevant information, thereby functioning as a guide to cognition.

In response to adult educators' concerns with the development of people in many dimensions as they relate to learning including the emotional, cognitive, social, psychological, and biological domains (Taylor, Marienau, & Fiddler, 2000), it has been suggested that research investigate the emotional dimension of transformational learning. In like manner, Salovey, Bedell, Detweiler, and Mayer (2000) posited that research on emotional intelligence should take the direction not of investigating its affects in a special class, but studying its integration into existing curricula. For example, students can learn how to observe classmates' emotions in a communication class, or how to regulate their own emotions in a business negotiations class, or explore their emotions in a literature class.

Historically, reading has been conceptualized as comprising four distinct but interdependent processes: decoding, literal comprehension, inferential comprehension, and comprehension monitoring (Fredriksen, Warren, & Rosebery, 1985a, 1985b). Metacognitive reading strategies posit that reading is not automatic, but more dependent on direct cognitive efforts of the reader. Metacognitive reading theories suggest that reading is a process where the reader uses his or her knowledge and strategies to construct meaning from the text (Taraban, Kerr, & Rynearson, 2004). Moreover, in the psychology of learning, emotions have been studied as a crucial component of reading when constructing meaning (Eva-Wood, 2004; Oately, 2002; Rosenblatt, 1995; Zambo & Brem; 2004). Oately describes the process of reading whereby the reader becomes emotionally involved in literature through identification with the protagonist, developing sympathy for characters, and activating personal emotionally laden memories that resonate with story themes. Readers go through a process of transformation. Consequently, they assimilate the story and the emotions that arise through the language of the literature, which are transformed into the students' feelings. The research of Cupchik, Leonard, Axelrad, and Kalin (1998) reported significant differences in cognitive processes when students interpreted the emotional content of the reading subject matter. Cognition and emotion are intertwined in the act of reading (Zambo & Brem).

To explore the relationship of literature and emotional intelligence further from the perspective of transformational learning and the psychology of reading, which incorporates both cognition and emotion, Fischer and Fischer (2003) investigated the affects of a curriculum of short stories, plays, movies, and

Table 1
Poetry, Short Stories, and Plays Used in the Emotional Intelligence Curriculum

Sonny's Blues, Baldwin, J.	*Diving into the Wreck*
The Story of an Hour, Chopin, K.	*Power*
I Know a Man, Creeley	*Rape*
Divorce, Corkery, C.J.	*Trying to Talk to a Man*, Rich, A.
Cheats, Dischell	*My Papa's Waltz*, Roethke, T.
"Master Harold" … and the Boys, Fugard, A.	*The Woman's Rose*, Schreiner, O.
The Yellow Wallpaper, Gilman, C.P.	*In Dreams Begin Responsibilities*, Schwartz, D.
Those Winter Sundays, Hayden	*Hamlet*, Shakespeare, W.
Harlem (a Dream Deferred), Hughes, L.	*American Classic*, Simpson, L.
A Very Old Man with Enormous Wings, García Márquez, G.	*The Public Bath*
Death of a Salesman, Miller, A.	*I Went into the Maverick Bar, Snyder, G.*
Walking Around, Neruda, P.	*Antigone*, Sophocles
My Oedipus Complex, O'Connor, F.	*Feather Woman of the Jungle*, Tutola, A.
The Elder Sister, Olds, S.	*Autumn Begins in Martins Ferry, Ohio*, Wright, J.
After Twenty Years	

poems (see Table 1) on college freshmen. The class used class discussions, role plays, writing exercises, journaling, and small-group work. Lesson plans focused on teaching the students to identify the emotions of the literature and the affects of those emotions on their inner selves, how characters managed their emotions and how the students would respond in similar situations, and analyzing the consequences of emotions expressed and unexpressed in relationships and social interactions.

Fischer and Fischer (2003) studied how emotional intelligence may positively increase in a treatment group over and above a non-equivalent control group. Positive significant differences were reported from pre- to post-test on an emotional intelligence measure (Jerabek, 2000) after experiencing the semester-long curriculum of reading and responding to literature designed to increase emotional intelligence abilities. The changes recorded by the self-report measure were congruent with the positive results of a pre- and post-test administration of a behavioral measure involving students responding in writing to an emotionally laden video.

Although the work of Fischer and Fischer (2003) was significant, it was not sensitive enough to identify factors underlying the participants in the treatment group's response to the emotional literature. Studying emotions in response to literature is a new dimension of emotional intelligence and requires a more refined approach.

Evolving from the research on emotional intelligence and the use of literature to enhance the emotional quotient as a significant dimension of adult education, this study investigated the development and validation of a more sensitive instrument designed to measure people's emotional responses to literature. More specifically, the purpose of this study was to create a new

psychological instrument, the Affective Response to Literature Survey (ARLS). The research question of the study was: To what degree can a psychological measure of emotional responses to literature be developed and validated?

Method

Participants

A total of 165 students from a Northwest University introductory literature class participated in the study including 45 men (27%) and 116 women (70%) with four people not reporting sex. The participants had a mean age of 27.6 (*SD*=11.2) with a range of 18 to 62. Most participants, 81.8% (*n*=135), reported that they identified as being white; 4.2% (*n*=7) American Indian; 3% (*n*=5) Latino; 2.4% (*n*=4) African American; 1.8% (*n*=3) Pacific Islander; and .6% (*n*=1) Asian American. Note that 6.2% (*n*=10) did not report identifying with a group.

Instrumentation

Convergent and Discriminate Validity Instruments. Two instruments were used to provide convergent and discriminate validity for the Affective Response to Literature Survey (ARLS). The Friendship (Johnson, 2003) measure was used to provide a modest convergence with the ARLS. This measure was designed to measure a person's capacity to develop and maintain friendships. Accordingly, an ability to manage one's emotions is a part of the definition of friendship. The Friendship measure had good internal consistency (Cronbach's Alpha=.79) and high test-retest reliability (r=.92, p<.01). Also used in the study was the Relationship (Johnson) measure. The Relationship measure was designed to measure a person's capacity to develop and maintain relationships. Similarly, the ability to manage one's emotions is a part of the definition of relationship. The Relationship measure had good internal consistency (Cronbach's Alpha=.85) and good test-retest reliability (r=.86, p< .01).

ARLS Item Development. A review of literature on emotional intelligence provided a wealth of information from which items about identification and management of emotions emerged (Davies et al., 1998; Goleman, 1995; Jerabek, 2000; Mayer et al., 1999). Accordingly, a review of literature on the emotional affects of literature stimulated the development of items about readers' reactions to the emotional content of poems, short stories, and novels (Cupchik et al., 1998; Graesser, Singer, & Trabasso, 1994; Suh & Trabasso, 1993).

Subsequently, items were then formatted into a Likert type scale, where 1=almost never; 2=rarely; 3=sometimes; 4=often; and 5=most of the time.

Content Validity. Content validity for the ARLS was accomplished by employing the Content Validity Ratio process (Cohen, Swerdlik, & Phillips, 1996). Initially, 27 items were developed for the Affective Response to Literature Survey and were rated for inclusion by 10 professionals, five with expertise in the field of psychology and the others in literature. The experts had a mean age of 51.7 years (*SD*=7.8), 50% had a doctorate, and the others a master's degree; 90% were female. The experts had a mean of 19.1 years (*SD*=10.4) working as professionals. The professionals reviewed each of the items using the following scale: 1=essential, 2=useful but not essential, and 3=not essential. The following formula was then used to compute the validity ratio:

$$\frac{CVR = ne - N/2}{N/2}$$

In this formula CVR=content validity ratio, ne=number of professionals indicating the items as essential, and *N*=total number of professionals. For significance at the .05 level and inclusion in the ARLS, each item would have met the criteria of a CVR of .62 or higher (Cohen et al., 1996). Of the original 27 items 18 were retained for inclusion in the ARLS.

Readability. To determine the reading level of the ARLS, the Flesch-Kincaid Index (Flesch, 1974) was employed to give a statistical analysis of the difficulty of the text. The formula is 0.39 x the average number of words in sentences + 11.8 x the average number of syllables per word—15.59. The level was computed to be grade 10.

Procedures

The ARLS was posted in written form on a Web site at the beginning of the semester for students attending an introductory literature class at a Northwest University. Students were given a number that they posted on the Web site to indicate they were a part of the research group. The Web site was available four weeks and then data were computed.

Results

Psychometrics

Means and standard deviations for the 18 items in the ARLS can be seen in Table 2.

Respondents rated as highest the two items #5 *When I read literature about characters I feel I know them* (*M*=3.85, *SD*=.86) and #8 *I think about the relationships between characters in literature even after I have finished reading* (*M*=3.58, *SD*=1.01). Conversely, respondents rated as lowest the two items #13 *I have joined an organization or group after reading about it in literature because I have stronger feelings of support for its purpose* (*M*=1.94, *SD*=1.02) and #12 *I have supported an organization or group after reading about it in literature because I have stronger feelings of support for its purpose* (*M*=2.38, *SD*=1.08). The overall mean for the test was computed to be 54.9 (*SD*=11.4).

Reliability. The ARLS demonstrated high internal consistency (Cronbach's alpha=.90). In addition, it demonstrated high test-retest reliability (r=.90, p<.001).

Construct Validity. Convergent construct validity for the ARLS was evidenced via correlations with relevant factors as seen in Table 3. As hypothesized, very modest to modest correlations were computed for the ARLS and the corresponding measures of Friendship, Relationship, Interest in Literature, Number of Books Read/Year, Number of Books Read/Month, and Number of Books Read/Week. The construct represented by the ARLS would share some properties of the other constructs but not to a high degree.

Noted in the analysis of the results, it was confirmed that where poor correlations might be hypothesized, they were evident such as between Friendship and Number of Books Read/Year. Conversely, where strong correlations might be hypothesized, they were evident such as between Number of Books Read/Month and Number of Books Read/Week.

Joint Factor Analysis. To find evidence of discriminate construct validity, a Varimax rotated factor analysis was carried out to explore the divergence of the ARLS, Friendship, and Relationship measures and to determine subscales in

Table 2
Means and Standard Deviations for ARLS Items

Item		*Mean*	*Standard Deviation*
1.	I have cried while reading literature.	2.36	1.13
2.	I have laughed out loud while reading literature.	3.52	.77
3.	I have felt more connected to other people while reading literature.	3.13	1.02
4.	I have learned about how people from other cultures express their feelings through reading their literature.	3.40	1.05
5.	When I read literature about characters I feel I know them.	3.85	.86
6.	I read about characters in literature because how they solve their problems intrigues me.	3.16	1.02
7.	The stronger the tensions between characters in literature, the more I like it.	3.46	1.00
8.	I think about the relationships between characters in literature even after I have finished reading.	3.58	1.01
9.	I enjoy reading about complicated relationships in literature.	3.27	1.05
10.	I have changed the way I feel about people from another culture because of reading their literature.	3.02	1.00
11.	I have changed the way I feel about significant people in my life because of what I have read in literature.	2.93	1.08
12.	I have supported an organization or group after reading about it in literature because I have stronger feelings of support for its purpose.	2.38	1.08
13.	I have joined an organization or group after reading about it in literature because I have stronger feelings of support for its purpose.	1.94	1.02
14.	I feel I have a better understanding of some of my emotions after reading literature.	3.05	1.01
15.	I have asked myself why I feel the way I do after reading literature.	2.80	1.14
16.	I have analyzed my relationships with the significant people in my life after reading literature.	3.00	1.12
17.	I have talked to someone else about my feelings after reading literature.	2.73	1.21
18.	After reading about emotions expressed in literature I have sought to read similar literature because I enjoy it.	3.32	1.12

the ARLS (Huck, 2000). Six factors were extracted using principal component analysis as seen in Table 4.

The six factors accounted for 59.3% of the total variance. The Friendship (principal component #3—items 19-24) and Relationship (principal component #2—items 25-29) measures were distinct from the four factors that comprised the ARLS. The first factor (items 1, 14-18) included items that involved reflecting on emotions and was titled *Reflective Synthesis*. The fourth factor (items 12 & 13) included items that involved acting on emotions and was titled *Acting with Volition*. The fifth factor (items 6-11) included items that involved processing emotions and was titled *Processing*. Last, the sixth factor (items 2-5) in-

Table 3
Correlations of Relevant Measures

Measure[1]	1	Measure[1] 2	3	4	5	6	7
1		.27*	.29*	.49*	.23*	.29*	.36*
2			.64*	.10	.01	.05	.02
3				.13	.09	.11	.15
4					.48*	.55*	.51*
5						.86*	.71*
6							.88*
7							

*$p<.01$.
Measure[1] 1=ARLS, 2=Friendship, 3=Relationships, 4=Interest in Literature, 5=No. of Books Read/Year, 6=No. of Books Read/Month, 7=No. of Books Read/Week.

cluded items demonstrating empathetic responses and was titled *Empathetic Responding*.

Discussion

Historical intelligence testing has narrowly focused on but a few dimensions of people's abilities. However, the constructs that have been identified as contributing to intellectual processes have continually expanded. Moreover, adult education has recently seen the emergence of a multidimensional theory that is encompassed in the concepts of transformational learning. As a response to this theory, research has begun investigating emotional intelligence as an important factor. The importance of cognition and emotion as fundamental to reading has been established. This has led to studying the use of literature as means of exploring the affective domain. The Affective Response to Literature Survey (ARLS) was a psychological measure developed and validated as a sensitive tool to understand more closely the emotional experiences of people in connection to literature.

The ARLS was developed through a rigorous process that assisted in the validation of its content and readability. Furthermore, the items that remained after the process proved to have high internal consistency and test-retest reliability. To determine the instrument's construct validity, its relationships with a number of factors were analyzed. The ARLS showed positive correlations with measures of Friendship, Relationships, Interest in Literature, Number of books read per year, month, and week.

Understanding the interplay between emotional intelligence and transformational learning as it is applied to the study of literature will be greatly enhanced by the development of the ARLS. It is recognized that the work of the current investigation, although significant, is a beginning. Most of the experts validating the items for the measure were women, which influenced its development. Additional limitations of the study include that the participants were overwhelmingly white and female, indicating that further research needs to be conducted with more men and minority populations. Further research should

Table 4
Joint Factor Analysis of ARLS, Friendship, and Relationship Measures

Measures And Items	*Principal Components*					
ARLS	1	2	3	4	5	6
1	**.50**	.18	–.01	–.01	–.10	.38
2	.18	–.11	.25	.02	.01	**.75**
3	.37	.11	.02	.14	.25	**.51**
4	.13	.20	–.17	.20	.39	**.60**
5	.38	.08	.05	–.11	.37	**.40**
6	.39	.02	.13	.25	**.40**	.23
7	.08	.04	.17	.10	**.74**	.03
8	.36	.09	.28	.03	**.55**	.16
9	.30	.13	.15	.02	**.57**	.06
10	.31	.09	–.13	.31	**.45**	.31
11	.29	.01	.05	.31	**.59**	.03
12	.31	.06	.02	**.68**	–.04	.10
13	.14	.03	.09	**.78**	.04	.05
14	**.70**	.04	.04	.31	.21	.11
15	**.77**	.06	–.03	.17	–.11	.10
16	**.76**	.08	.09	.29	.02	.19
17	**.67**	.15	.04	.09	.05	.03
18	**.64**	.15	.04	.09	.27	.07
Friendship						
19	.09	.39	**.54**	.02	.13	–.03
20	.11	.17	**.74**	–.02	.11	–.03
21	.25	.33	**.41**	–.19	.26	–.08
22	–.29	.18	**.53**	.25	.29	.08
23	.03	.39	**.72**	.03	–.01	.12
24	.09	.38	**.58**	.08	.05	.21
Relationship						
25	.06	**.59**	.30	.17	.06	.10
26	.09	**.77**	.12	.09	–.01	.13
27	.07	**.75**	.11	.07	.06	–.12
28	–.06	**.79**	.15	.18	–.11	–.07
29	.11	**.73**	.23	.10	.09	.09
39	.24	**.70**‘.	.17	–.09	–.01	.08

also look at the influences of sex, age, and personality on emotional responses to literature.

In addition, predictive validity is an important part of instrument development, has not been addressed by the current research, and remains for future study. Furthermore, research into the ability of the instrument to detect changes due to curricular experiences will also provide further evidence of construct validity and usefulness.

The most important analysis of the research was the identification of four underlying factors of the ARLS: Reflective Synthesis, Acting with Volition, Processing, and Empathetic Responding. The joint factor analysis also pro-

vided evidence of discriminate validity for the ARLS. The measures of Friendship and Relationship were identified as being distinct from the four factors comprising the ARLS.

Identifying the four factors has important implications for conducting more sensitive research on literature, emotional intelligence, and transformational learning. In the study of literature, the ARLS holds great diagnostic potential for educators possibly to identify students' areas of need in their emotional responses to literature. For example, an educator was going to teach, *To Kill a Mockingbird* by Lee (1960), a novel about racial tensions in the South of the United States in the segregated 1950s. They would administer a pre-test of the ARLS to determine the group's overall score and subtotal scores on the four factors. An average score would be 2.5 on the 5-point scale. Hypothetically, the class scored an average of 2.0 on the Reflective Synthesis and Empathetic Responding factors. To improve Reflective Synthesis, the educator might have the students write journals about the characters' relationships as they read the story and engage in small-group discussions. For Empathetic Responding, the class may watch documentaries on the US Civil Rights Movement, particularly those that graphically depict the treatment of African Americans by whites, and then write essays from the perspectives of the white and African American characters in the novel. At the close of the lessons, the educator would administer a post-test to determine the effectiveness of the class.

A note about the context for using the ARLS: the measure was not designed to give the test administrator an indication if the student is feeling and then identifying appropriate emotions for the subject matter. A student may read a passage on racial discrimination and respond with empathetic emotions for the discriminators. The instrument would not give an indication that this was an inappropriate emotional response; however, the ARLS might indicate under the Empathetic Responding and Processing factors whether they sufficiently respond to cultural diversity. A lower score might prompt further inquiry through journaling and written class assignment with the students about their perspectives on cultural diversity. Literature does call up emotions (such as the novel on racial conflict *To Kill a Mockingbird* (Lee, 1960), which may require the students to reflect on and process their emotional experiences, and may lead to changing their views.

Reflective Synthesis, Acting with Volition, Processing and Empathetic Responding to emotions as subscales will greatly facilitate a more refined exploration into the transformational processes of reflection on one's individual world view, understanding the constraints of one's perspective, integrating one's perspectives with those of others, and making meaning of one's experiences. Future research might explore the many relationships of the four subscales with the transformational learning process.

Understanding transformational learning through the emotional content of literature has many exciting possibilities. Intrapersonal, interpersonal, and cultural emotional issues create difficult conflicts for people. These may be alleviated to some degree by people reading literature and experiencing the emotional issues vicariously. Subsequently, they may then understand the emotional processes offered by characters, situations, narratives, and perspectives that may then be applied in their own lives. The ARLS may help readers

to understand themselves more fully and to give them direction to enhance their personal growth in this area of study.

Conclusions

Through a rigorous process, research has found the ARLS to be a viable instrument, but recognizes that further evidence of its validity is needed. It can be concluded that it has substantial psychometric properties of reliability and validity. It may be used for a more sensitive exploration of use of the emotional content in literature in the transformational learning process.

The theories of emotional intelligence, transformation learning in adult education, metacognitive reading strategies, and emotion and cognition in literature contributed to the development of the ARLS. Consequently, the ARLS has implications for each of these areas. First, enhancing emotional intelligence has been a goal of the theory since its inception. Using literature as a medium for increasing emotional intelligence has been demonstrated by the research of Fischer and Fischer (2003). The ARLS might be used in future research on evaluating a literature curriculum with emotional intelligence as its theme. Identifying which of the four factors underlying the ARLS contribute to increased emotional intelligence might provide important information for a more refined curriculum. Second, Taylor (2001) has researched emotion as a basic construct of transformational learning in adult education. In that study a neurobiological approach was used; however, a literary study using the ARLS might explore and provide evidence for how the emotional component relates to adult learners making meaning of their experiences. Last, metacognitive reading strategies are based on the reader making meaning of the text. A study using the ARLS to explore the emotional response to the text in relation to decoding, literal comprehension, inferential comprehension, and comprehension monitoring would provide interesting new directions.

References

Cohen, R.J., Swerdlik, M.E., & Phillips, S.M. (1996). *Psychological testing and assessment*. Mountain View, CA: Mayfield.

Cross, K.P. (1981). *Adults as learners*. San Francisco, CA: Jossey-Bass.

Cupchik, G.C., Leonard, G., Axelrad, E., & Kalin, J.D. (1998). The landscape of emotion in literary encounters. *Cognition and Emotion, 12*, 825-847.

Davies, M., Stankov, L., & Roberts, R.D. (1998). Emotional intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology, 75*, 989-1015.

Doty, G. (2001). *Fostering emotional intelligence in K-8 students*. Thousand Oaks, CA: Corwin Press.

Elias, M.J., Zins, J.E., Weissberg, R.P., Frey, K.S., Greenberg, M.T., Haynes N.M., Kessler, R., Schwab-Stone, M.E., & Schriver, T.P. (1997). *Promoting social and emotional learning: Guidelines for educators*. Alexandria, VA: ASCD.

Eva-Wood, A.L. (2004). Thinking and feeling poetry: Exploring meanings aloud. *Journal of Educational Psychology, 96*, 182-191.

Fischer, R.G., & Fischer, J.M. (2003). The development, testing, and evaluation of an emotional intelligence curriculum. *MPAEA Journal of Adult Education, 32*(1), 7-17.

Flesch, R.F. (1974). *The art of readable writing*. New York: Harper Collins.

Frederiksen, J., Warren, B., & Roseberry, A. (1985a). A componential approach to training reading skills: Part 1, perceptual units training. *Cognition and Instruction, 2*, 91-130.

Frederiksen, J., Warren, B., & Roseberry, A. (1985b). A componential approach to training reading skills: Part 2, decoding and use of context. *Cognition and Instruction, 2*, 271-338.

Freire, P. (1970). *Pedagogy of the oppressed*. New York: Seabury.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.

Goleman, D. (1995). *Emotional intelligence*. New York: Bantam.

Graesser, A.C., Singer, M., & Trabasso (1994). Constructing inferences during narrative text comprehension. *Psychological Review, 101*, 371-395.
Huck, S. (2000). *Reading statistics and research* (3rd ed.). New York: Addison Wesley Longman.
Jerabek, I. (2000). *Emotional intelligence.* Available: http://www psych tests.com/tests/iq/emotional_iq_r2_accessl.html
Johnson, D.W. (2003). *Reaching out: Interpersonal effectiveness and self-actualization* (8th ed.). Boston, MA: Allyn and Bacon.
Kamphaus, R.W., Benson, J., Hutchinson, S., & Platt, L.O. (1994). Identification of factor models for the WISC-III. *Educational and Psychological Measurement, 54*, 174-186.
Knowles, M.S. (1984). Introduction: The art and science of helping adults learn. In M.S. Knowles & Associates, *Andragogy in action: Applying modern principles of adult learning*. San Francisco, CA: Jossey-Bass.
Lee, H. (1960). *To kill a mockingbird*. Philadelphia, PA: Lippincott.
Mayer, J.D., Caruso, D.R., Salovey, P. (1999). Emotional intelligence meets standards for traditional intelligence. *Intelligence, 27*, 267-298.
Mayer, J.D., & Cobb, C.D. (2000). Education policy on emotional intelligence: Does it make sense? *Educational Psychology Review, 12*, 163-183.
Mayer, J.D., & Salovey, P. (1993). The intelligence of emotional intelligence. *Intelligence, 12*, 433-442.
Mayer, J.D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Implications for educators* (pp. 3-31). New York: Basic Books.
Mezirow, J. (1991). *The transformative dimensions learning*. San Francisco, CA: Jossey-Bass.
Oatley, K. (2002). Emotions and the story worlds of fiction. In M.C. Green, J.J. Strange, & T.C. Brock (Eds.), *Narrative impact: Social and cognitive foundations* (pp. 39-69). Mahwah, NJ: Erlbaum.
Rosenblatt, L.M. (1995). *Literature as exploration*. New York: Modern Language Association.
Salovey, P., Bedell, B.T., Detweiler, J.B., & Mayer, J.D. (2000). Current directions in emotional intelligence research. In M. Lewis & J.M. Haviland-Jones (Eds.), *Handbook of emotions* (pp. 504-520). New York: Guilford Press.
Suh, S., & Trabasso, T. (1993). Inferences during reading: Converging evidence from discourse analysis, talk-aloud protocols, and recognition priming. *Journal of Memory and Language, 2*, 279-301.
Taylor, K. (2001). Transformative learning theory: A neurobiological perspective of the role of emotions and unconscious ways of knowing. *International Journal of Lifelong Education, 20*, 218-236.
Taylor, K., Marienau, C., & Fiddler, M. (2000). *Developing adult learners: Strategies for teachers and trainers*. San Francisco, CA: Josey-Bass.
Taraban, R., Kerr, M., & Rynearson, K. (2004). Analytic and pragmatic factors in college students' metacognitive reading strategies. *Reading Psychology, 25*, 67-81.
Thorndike, R.L., Hagen, E.P., & Sattler, J.P. (1986). *Technical manual for the Stanford-Binet Intelligence Scale, Fourth edition*. Chicago, IL: Riverside.
Wechsler, D. (1997). *Wechsler Adult Intelligence Scale—Third edition*. San Antonio, TX: Psychological Corporation.
Zambo, D., & Brem, S.K. (2004). Emotion and cognition in students who struggle to read: New insights and ideas. *Reading Psychology, 25*, 189-204.